

Claim List:

1. (original) A sprayer apparatus, comprising:  
a pressure chamber having an inlet and an outlet;  
a backflow valve having two one-way valves separated by a weep chamber, said backflow valve being positioned in fluid communication with the inlet of said pressure chamber such that the two one-way valves prevent fluid flow from said pressure chamber through the outlet; and  
a sealed vessel in fluid communication with said pressure chamber.
2. (original) The sprayer apparatus of Claim 1, further comprising a pressurized fluid source in fluid communication with the inlet of said pressure chamber.
3. (original) The sprayer apparatus of Claim 2, wherein said pressurized fluid source is connected to the inlet of said pressure chamber by a quick-disconnect coupling.
4. (original) The sprayer apparatus of Claim 1, further comprising a shutoff valve in fluid communication with the outlet of said pressure chamber, the shutoff valve normally preventing fluid flow from said pressure chamber through the outlet and being operable to allow fluid flow from said pressure chamber through the outlet.
5. (original) The sprayer apparatus of Claim 1, wherein the weep chamber of said backflow valve includes a weep plunger that reduces backflow pressure within the weep chamber.
6. (original) The sprayer apparatus of Claim 5, wherein said weep plunger defines a plurality of apertures and said weep chamber further comprises a biasing spring and a plunger guide having a head, wherein said spring biases said weep plunger against the head of said plunger guide and the head of said plunger guide partially covers the apertures defined by the weep plunger.

7. (original) The sprayer apparatus of Claim 5, wherein the weep chamber of said backflow valve further includes a weep outlet having a seal tube configured to be ejected from the weep outlet when under a pre-determined backflow pressure in the weep chamber.

8. (original) The sprayer apparatus of Claim 1, wherein the weep chamber of said backflow valve includes a weep diaphragm that reduces backflow pressure within the weep chamber.

9. (original) The sprayer apparatus of Claim 8, wherein the weep chamber of said backflow valve further includes a weep outlet having a seal tube configured to be ejected from the weep outlet when under a pre-determined backflow pressure in the weep chamber.

10. (original) The sprayer apparatus of Claim 9, wherein the weep diaphragm defines an aperture and said weep chamber further comprises a shoulder such that the shoulder restricts the amount that the weep diaphragm may flex when under backflow pressure.

11. (original) The sprayer apparatus of Claim 1, wherein said pressure chamber is configured as a sprayer wand.

12. (currently amended) A sprayer system comprising: The sprayer apparatus of Claim 1,

further comprising a sprayer wand handle having an outlet in communication with said pressure chamber;

a water tank in fluid communication with said sprayer handle;  
a liquid additive tank in fluid communication with said sprayer handle; and said  
a backflow valve being positioned between said water tank and said sprayer  
handle such that said backflow valve prevents fluid flow from said sprayer handle to said  
water tank.

13. (currently amended) The sprayer system apparatus of Claim 12, wherein said backflow valve comprises said two one-way valves separated by a said weep chamber.

14. (currently amended) The sprayer system apparatus of Claim 13, wherein the weep chamber includes a weep plunger that reduces backflow pressure within the weep chamber.

15. (currently amended) The sprayer system apparatus of Claim 14, wherein said weep plunger defines a plurality of apertures and said weep chamber further comprises a biasing spring and a plunger guide having a head, wherein said spring biases and weep plunger against the head of said plunger guide and the head of said plunger guide partially covers the apertures defined by the weep plunger.

16. (currently amended) The sprayer system apparatus of Claim 13, wherein the weep chamber includes a weep diaphragm that reduces backflow pressure within the weep chamber.

17. (currently amended) The sprayer system apparatus of Claim 16, wherein the weep chamber further includes a weep outlet having a seal tube configured to be ejected from the weep outlet when under a pre-determined backflow pressure in the weep chamber.

18. (currently amended) The sprayer system apparatus of Claim 17, wherein the weep diaphragm defines an aperture and said weep chamber further comprises a shoulder such that the shoulder restricts the amount that the weep diaphragm may flex when under backflow pressure.

19. (currently amended) The sprayer system apparatus of Claim 12, wherein said water tank is pressurized and is connected to said sprayer handle by a quick-disconnect coupling.

20. (currently amended) A The sprayer system apparatus according to Claim 1 connectable to be connected to an externally pressurized water source, and further comprising:

a mixing chamber;

a tank in fluid communication with said mixing chamber, said tank containing a liquid additive;

means for supplying a pressurized water stream; and

a said backflow valve configured to prevent the liquid additive from flowing into said means for supplying a pressurized water source.

21. (currently amended) The sprayer system apparatus of Claim 20, wherein said backflow valve comprises said two one-way valves separated by a said weep chamber.

22. (currently amended) The sprayer system apparatus of Claim 21, wherein the weep chamber includes a weep plunger that reduces backflow pressure within the weep chamber.

23. (currently amended) The sprayer system apparatus of Claim 21, wherein the weep chamber includes a weep diaphragm that reduces backflow pressure within the weep chamber.

24. (currently amended) The sprayer system apparatus of Claim 23, wherein the weep chamber further includes a weep outlet having a plastic seal tube configured to be ejected from the weep outlet when under a pre-determined backflow pressure in the weep chamber.